

puropodtm
compact reverse osmosis system



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OPERATION AND MAINTENANCE MANUAL



puropod is Made in the USA

Distributed by **Pure Water Group**, Calistoga, CA

Congratulations on your purchase of a



Compact Reverse Osmosis
Drinking Water System

◆—————◆

Your **puropod** is the original patented Compact Reverse Osmosis Water Purification System that you attach yourself. It is constructed with the finest materials available, including a **Dow FilmTec** NSF and FDA approved reverse osmosis membrane. **Puropod** is made in the USA.

Pure Water Group believes everyone deserves clean, purified water for drinking and cooking. We are dedicated to the distribution of simple, effective, and affordable water treatment solutions to fulfill that goal.

Your **puropod** has been designed for effortless connection, operation and maintenance. This manual tells you everything you need to know to enjoy optimal performance and long life of your **puropod** device.

Please read through all the instructions carefully before assembling and operating your **puropod**. We want you to enjoy all the benefits of your new product.

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Pure Water Group thanks you
for your purchase.

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The Reverse Osmosis Process

Reverse Osmosis - often referred to simply as "R.O." is a process that utilizes pressure to force water across a membrane containing microscopic pores that prevent contaminants from passing through. It is recognized by the EPA (Environmental Protection Agency) as one of the finest filtration technologies available today, and it is the technology most common used by water bottlers and other beverage manufacturers to purify their products.

R.O. is effective at eliminating or substantially reducing a very wide array of contaminants, and of all technologies used to treat drinking water in residential applications, it has the greatest range of contaminant removal. Reverse osmosis can remove particles as small as individual ions.

The **EPA (United States Environmental Protection Agency)** rates Reverse Osmosis as a **BAT (Best Available Technology)** for removing arsenic, fluoride, microbes, nitrate, radium, uranium, lead, aluminum, mercury, asbestos, other heavy metals, and TOC (total organic carbon - a measure of organic contaminants).



Reverse Osmosis
is
First Aid for Water



TYPICAL REMOVAL RATES FOR THIN-FILM MEMBRANES

Partial list of Elements and the Percent R.O. Membranes will remove*

Source: "Water Processing: 3rd Edition", Wes McGowan, Water Quality Assoc. 2001

Arsenic	94%	Lead	99%
Asbestos	99%	Mercury	91%
Cyanide	86%	Nitrates	87%
Barium	99%	Nitrites	87%
Cadmium	98%	Radium	80%
Copper	99%	Selenium	96%
Fluoride	93%	Chromium (3 & 6)	86%

* at 65 psi feed pressure, 77° temperature

How the **puropod** Works

The **puropod** uses an **FDA** (Food & Drug Administration) and **NSF** (National Sanitation Foundation) approved membrane material to remove a wide range of impurities from water. The patented **puropod** is the only single canister reverse osmosis (R.O.) system that includes carbon and sediment pre-filtration as an integral part of the filtration process. A carbon / sediment filter removes sediment above 20 microns as well as chlorine, and many "volatile" contaminants (VOCs) such as benzene, MTBE, and radon. It also removes tastes and odors, and other compounds that can shorten the life of the R.O. membrane.

The water entering the appliance first passes through the carbon pre-filter, then flows to the reverse osmosis membrane which performs a molecular separation process dividing the water into two streams: the product stream, and the concentrate or second stream. The product stream is purified drinking water. The second stream carries away the impurities rejected by the membrane down to molecular (sub micron) size. The purified water exits the appliance through the tube at the top, while the second stream flows out of the bottom of the **puropod** and can be used purposes other than drinking or cooking.

Unlike simple carbon filters, removed impurities are continually flushed away from the **puropod** membrane, giving it a long useful life. The **puropod** system is unsurpassed by any home water filtration device or bottled drinking water found on the market today, and will provide your family with the finest quality drinking water.



puropod™ Operating Guidelines

Following these simple guidelines will provide you with the best product performance, and deliver the longest product life.

When operating your **puropod**:

- Maximum feed water pressure should not exceed 100 psi. (Typical household water pressure is 35 - 50 psi)
- For use with potable water only
- For use with cool water only (below 100° F)
- Do not use on hot water tap
- When connecting the **puropod** for the first time, discard all water produced (product and second stream) for at least four hours before storing drinking water
- Keep unit from freezing temperatures

puropod™ Performance Data

Model	PSROFM15
Membrane Production	15 gallons (57 liters) per day*
Carbon Pre-Filter Performance	Removes Chlorine, Taste & Odor, Sediment above 20 microns
Rated Membrane Life	1 year or 400 gallons (1,512 liters) of product water
Rated Carbon Block life	3 months or 125 gallons (475 liters) of product water

*Based on a feed pressure of 60 psi (approximately 4 bar), water temperature of 77° F (25° C), and a TDS (Total Dissolved Solids) level of 500 ppm (parts per million).

Membrane performance and water production rates are dependent on incoming water conditions. Your actual performance may vary. The **EPA** recommends that all reverse osmosis systems including the **puropod** should only be used on municipal water supplies or on systems with water that has been determined to be microbiologically safe.

Getting Started with your puropod

Your package contains the following:

puropod System
containing R.O.
membrane &
Carbon/Sediment
Pre-filter



Feed Tube
with Hose
Connector



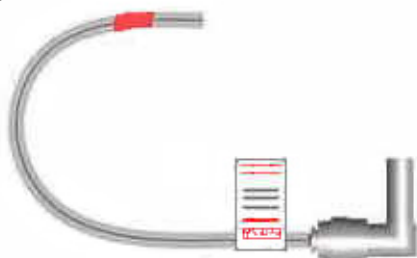
Wall mount
bracket



30" of white flexible
tubing for product
water (may have
Green markings)



Flow Restrictor Assembly
with elbow stem fitting and
bottom discharge tubing
(May have **Red** markings
and label)



And, this manual.

puropod Mounting and Attachment

Step 1:

Mount bracket on wall in
suitable location, with user-
supplied fasteners



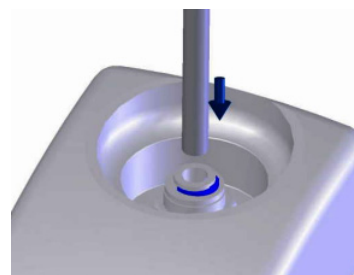
Step 2:

Attach the water feed
with Hose Connector to
the hose outlet



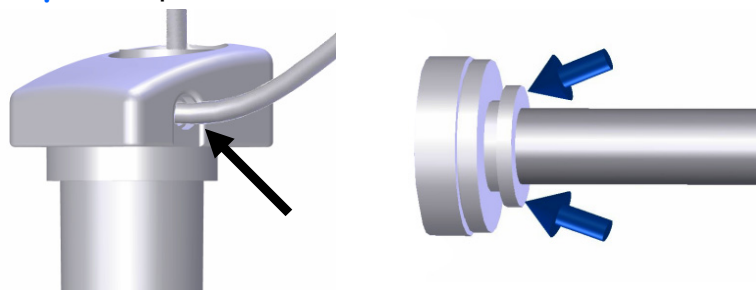
Step 3:

Connect the loose end of the
water feed tubing to the inlet
on the top of the **puropod**.
**Tubing must be inserted
firmly in order to compress
the internal o-ring and insure
a leak-free connection
(should insert about 5/8").**



Step 4:

Install the flexible white product tubing (**Green** markers) into the connector on the side of the **puropod** cap.



Tubing must be inserted firmly in to fully compress the internal o-ring and insure a leak-free connection (should insert about 5/8").

Important:

Flush unit according to instructions **before installing flow restrictor assembly!**

Preparing the **puropod** for First Use

Important:

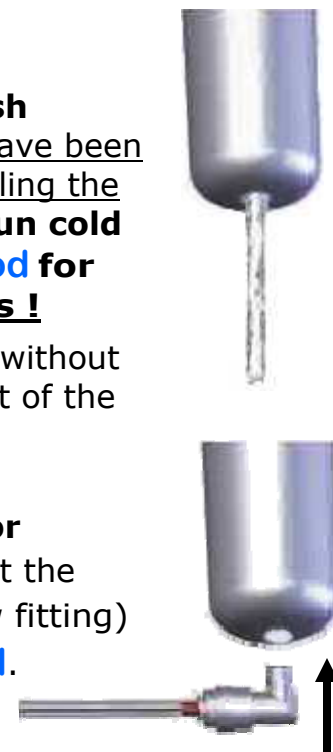
Step 1: Carbon Pre-filter Flush

Once the feed connections have been completed, and before installing the Flow Restrictor Assembly, **run cold water through the **puropod** for at least five seconds !**

Running water through the unit without restriction flushes the "fines" out of the carbon filter.

Step 2: Install Flow Restrictor

Turn off the water. Firmly insert the Flow Restrictor Assembly (elbow fitting) into the bottom of the **puropod**. Make sure the fitting is fully seated in the connection.



Step 3: Membrane Preparation

Important - First Use Only:
Run your **puropod for four hours and discard all water produced**

during this initial period. This conditions the membrane for use.

Congratulations! You are now ready to begin making purified water. Using a storage container, collect the purified water made by the **puropod** for use anytime you need water.



puropod Disassembly and Reassembly

Step 1:

The lower section (sump) is disengaged from the upper section (head) by grasping both parts firmly and rotating the sump as shown.



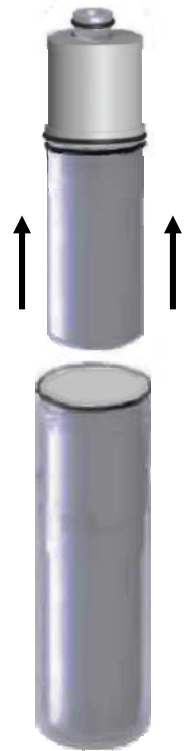
Step 2:

Once the sump is disengaged from the head, the two sections may be separated by gently pulling them apart.



Step 3:

Remove the filter stack from the sump by gently twisting and pulling upward on the top of the membrane assembly.



Step 4:

Remove the pre-filter from the membrane stem by gently twisting it and pulling it upward. To perform a pre-filter change, simply discard the old pre-filter and replace with a new one.



Step 5:

Assembly is the opposite of disassembly. Thoroughly rinse parts and wipe clean. Parts should be slightly wet when reassembling. Take care to have all "O" Rings correctly positioned. Be careful to not dislocate "O" Rings when fitting parts back together.

puropod Replacement Parts

Carbon / Sediment
Pre-Filter cartridge



R.O. Membrane Assembly



Product Tubing



Flow Restrictor
with discharge tubing



Hose Bibb Adapter*
(optional)



Pre-Filter "O" Ring



Sump "O" Ring



Feed Inlet "O" Ring

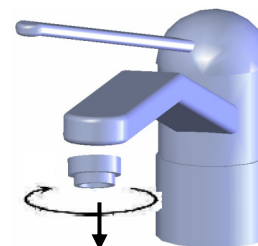


Countertop Faucet - Mount Model with Diverter Valve-

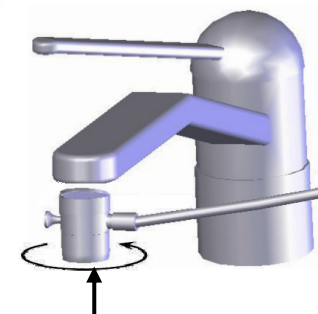
A. Place unit in supplied bracket.



B. Remove aerator
from faucet.



C. Install diverter valve supplied
with unit to faucet.
Use adapters as required.



D. If not already installed at the factory, connect
other end of the feed water tube to the feed water inlet
on top of your unit.

(Same as **Hose Connect** model - Step 3 / Page 7)

puropod Maintenance

Your **puropod** Compact R.O. System was designed to be virtually maintenance free. Simply follow these recommendations and your **puropod** should last for years.

- ◆ Clean your **puropod** with a damp cloth and mild dish soap. Do not use abrasive cleaners.
- ◆ To protect the R.O. Membrane, the carbon block pre-filter should be replaced every 3 months or 125 gallons of product water
(We have provided a page in this manual [Page 16] for you to record your pre-filter changes.)
- ◆ When not in use for extended periods, your **puropod** should be disconnected, placed in a plastic bag, and stored in the refrigerator.



puropod Warranty

This Limited Warranty covers parts and labor needed to repair any supplied item that proves to be defective in material, workmanship or factory assembly. This Limited Warranty covers the **puropod** product for one calendar year from date of purchase. The following items are subject to exclusions: membrane, filter, "O" rings, flow restrictor and all other parts or components that require regular replacement. This Limited Warranty applies only to the original purchaser.

Disclaimers

The Limited Warranty does not cover defects caused by improper use, alteration, lack of regular maintenance or as a result of fouling due to iron, hydrogen sulfide, silica, scaling from excessive hardness, or membrane breakthrough due to excessive chlorine. The manufacturer does not assume responsibility for damage caused by accident, fire or acts of God.

Incidental and Consequential Damages

PWG does not assume responsibility for payment of incidental and consequential damages as a result of the failure of this unit to comply with express or implied warranties.

Implied Warranties

The implied at-law warranties shall terminate one calendar year from the date of purchase. Some states do not allow limitations on implied warranties so the above limitation may not apply.

For service during the warranty period, contact **Pure Water Group** (support@pure-water-group.com).

puropod Purchase/Maintenance Record

Purchase Information:

Date of Purchase ___ / ___ / ____

Maintenance Performed:

Date	Operation
___ / ___ / ____	_____
___ / ___ / ____	_____
___ / ___ / ____	_____
___ / ___ / ____	_____
___ / ___ / ____	_____
___ / ___ / ____	_____
___ / ___ / ____	_____
___ / ___ / ____	_____
___ / ___ / ____	_____
___ / ___ / ____	_____
___ / ___ / ____	_____

puropod Testing /handheld TDS Meter

Our hand-held TDS (Total Dissolved Solids) Meter enables you to regularly monitor the performance of your **puropod**, and know when it’s time to change your pre-filter. Buy one - it’s fun to know how well your **puropod** is working.

Test Record (TDS):

Date	Pre-Treatment	Post Treatment
___ / ___ / ____	_____	_____
___ / ___ / ____	_____	_____
___ / ___ / ____	_____	_____
___ / ___ / ____	_____	_____
___ / ___ / ____	_____	_____
___ / ___ / ____	_____	_____
___ / ___ / ____	_____	_____
___ / ___ / ____	_____	_____
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